# **Table of Contents**

## 26.01.37 - Rules Governing Test Procedures and Instruments for Noise Abatement of Off Highway Vehicles

000. Legal Authority	. 2
001. Title And Scope.	. :
003. Appeals.	. :
004 005. (Reserved).	. :
004 005. (Reserved)	. :
007 009. (Reserved).	. :
010. Definitions.	. :
011 049. (Reserved).	.;
011 049. (Reserved)	.;
051 099. (Reserved).	. 4
100. Measurement.	. 4
101 149. (Reserved).	٠.
150. Equipment	. 4
151 999. (Reserved).	

#### IDAPA 26 TITLE 01 CHAPTER 37

### 26.01.37 - RULES GOVERNING TEST PROCEDURES AND INSTRUMENTS FOR NOISE ABATEMENT OF OFF HIGHWAY VEHICLES

#### 000. LEGAL AUTHORITY.

The Idaho Park and Recreation Board is authorized under Section 67-7125, Idaho Code to promulgate rules to effectuate the purposes of and aid in the administration of Section 67-7125, Idaho Code. (7-1-94)

#### 001. TITLE AND SCOPE.

- **01. Title**. The title of this chapter shall be cited in full as Idaho Department of Parks and Recreation Rules, IDAPA 26.01.37, "Rules Governing Test Procedures and Instruments for Noise Abatement of Off Highway Vehicles". (7-1-94)
- **O2. Scope**. This chapter establishes rules to effectuate the purposes of and aid in the administration and enforcement of Section 67-7125, Idaho Code. (7-1-94)

#### **002.** (RESERVED).

#### 003. APPEALS.

Any applicant who may be adversely affected by a final order, decision, ruling, or direction of the director or board may appeal such final order, decision, ruling, or direction as outlined under IDAPA 26.01.01.250, "Rules of Administrative Procedure of the Idaho Park and Recreation Board". (7-1-94)

#### 004. -- 005. (RESERVED).

#### 006. CITATION

The official citation of this chapter is IDAPA 26.01.37.000 et seq. For example, the citation for this section is IDAPA 26.01.37.006.

#### 007. -- 009. (RESERVED).

#### 010. **DEFINITIONS.**

As used in this chapter: (7-1-94)

- **01. All Terrain Vehicle (ATV)**. Any recreation vehicle with two (2) or more tires, under six hundred fifty (650) pounds and less than forty-eight (48) inches in width, traveling on low pressure tires, less than five (5) pounds per square inch, and designed to be ridden by one (1) person. (7-1-94)
- **02. A-Weighting Scale**. A sound filtering system contained in a sound meter which adjusts (weights) the incoming sound energy to approximate human hearing. (7-1-94)
  - **03. Calibrator.** A device used to standardize the reading of a sound level meter. (7-1-94)
- **04. CC**. The displacement (size) of an engine in cubic centimeters. The kc's of an engine refers to the piston displacement or engine size. (7-1-94)
- **05. Db or Decibel.** A unit used to measure the amplitude of sounds. As a sound measured in decibels increases, so does its loudness. (7-1-94)
- **06. Off Highway Vehicle (OHV)**. Any ATV or motorbike as defined in Section 67-7101, Idaho Code, used off public highways but excluding those vehicles used exclusively on private land for agricultural use or used exclusively for snow removal purposes. These vehicles, together with others not covered by these rules, are sometimes commonly known as off-road vehicles or ORMV's. (7-1-94)
  - **07. Operator.** Any person who is in physical control of an OHV. (7-1-94)

Page 2 IAC 2005

- **08. Red-Line Speed.** The lowest numerical engine speed included in the red zone on the OHV tachometer or prescribed by the manufacturer as compiled in the "Off-Highway Motorcycle and ATV Stationary Sound Test Manual" published by the Motorcycle Industry Council, Inc. (7-1-94)
- **Revolutions Per Minute (RPM)**. The number of times the crankshaft of an engine revolves in one (1) minute. (7-1-94)
- **10. Sound Level Meter.** An instrument used for measuring sound levels, which includes a microphone, an amplifier, and meter with frequency weighing networks, such as the A-weighting scale. (7-1-94)
- **11. Tachometer.** A device used to measure revolutions per minute (RPM) of an engine. Tachometers used to obtain sound level measurements may be permanently affixed to the OHV or may be portable units such as hand-held electric, vibrating reed, or inductive tachometers. (7-1-94)

#### 011. -- 049. (RESERVED).

#### 050. TEST PROCEDURE.

- **O1. Test Site**. The test site must be a flat, open surface free of large reflecting surfaces, other than the ground, such as parked vehicles, signboards, or hillsides located within sixteen (16) feet of the (OHV) being tested and the location of the microphone of the sound level meter. (7-1-94)
- **a.** Ambient sound level. The ambient sound level, including wind effects, at the test site due to sources other than the OHV being measured shall be at least ten (10) dB lower than the sound produced by the OHV under test.

  (7-1-94)
  - **b.** Wind speed. Wind speed at the test site shall be less than twenty (20) miles per hour. (7-1-94)
- c. Persons in test area. While making sound level measurements, not more than one (1) person other than the operator, the measurer, and the assistant, if necessary, shall be within ten (10) feet of the OHV under test or the microphone of the sound level meter, and that person shall be directly behind the measurer on a line through the microphone of the sound level meter and the measurer. (7-1-94)
- **O2. Test Surface**. The surface of the ground within the test area shall be paving or hard packed earth, level within an average slope of five (5) inches per foot and shall be free of loose or powdered snow, plowed soil, grass of a height greater than six (6) inches, trees, or other extraneous materials. (7-1-94)

#### **03. Position of OHV**. (7-1-94)

**a.** For two (2) wheeled OHV's, the operator may sit astride of the OHV, in normal riding position with both feet on the ground. If this is not possible because of the seat height of the OHV, an assistant may hold the OHV by the forks, front wheel, or handlebars so that it is stationary with its longitudinal plane of symmetry vertical. If an assistant is not available to assist in holding the OHV upright, the operator may use a box, rock or other object to rest his feet upon to steady the OHV, so long as the OHV longitudinal plane of symmetry is vertical and stationary.

(7-1-94)

**b.** For three (3) wheeled and four (4) wheeled ATV's, the operator may sit in the normal riding position with one (1) or both feet on the footrests. (7-1-94)

#### **04. Operation of OHV**. (7-1-94)

- **a.** If the OHV has a neutral gear, the operator shall run the engine with the gear box in neutral at a speed equal to one-half (1/2) of the rated engine speed or one-half (1/2) of the red line speed specified by the manufacturer as compiled in the "Off Highway Motorcycle and ATV Stationary Sound Test Manual". (7-1-94)
- **b.** If the OHV has no neutral gear, it shall be operated either with the rear wheel(s) at least two (2) inches clear of the ground or with the drive chain or belt removed, or the clutch, if the OHV is so equipped, disengaged. (7-1-94)

- **05. Engine Temperature**. The engine of the OHV being tested shall be at a normal operating temperature during the test. (7-1-94)
- 051. -- 099. (RESERVED).

#### 100. MEASUREMENT.

- **01. Sound Level Meter Settings**. The sound meter shall be set for the A-weighing scale and may be set for either slow or fast dynamic response. (7-1-94)
  - **O2. Exhaust Outlets.** Tests shall be made on each side of the OHV having an exhaust outlet. (7-1-94)
  - 03. Location of the Microphone of the Sound Level Meter.

(7-1-94)

- **a.** The microphone of the sound level meter shall be located twenty (20) inches one-half (1/2) inch behind the exhaust. If there is more than one (1) exhaust outlet per side, the microphone of the sound level meter shall be located with reference to the rear most outlet. (7-1-94)
- **b.** The microphone of the sound level meter shall be within one-half (1/2) inch of the height of the exhaust outlet. (7-1-94)
- **c.** The microphone of the sound level meter shall be at a forty-five (45) degree ten (10) degree angle to the normal line of travel of the OHV. (7-1-94)
- **d.** The longitudinal axis of the microphone of the sound level meter shall be in a plane parallel to the ground plane. (7-1-94)
- **e.** The axis of the microphone of the sound level meter shall be oriented as specified for field response by the manufacturer. (7-1-94)
- **04. Attachments Prohibited.** No wire or other rigid means of distance measurement shall be attached to the sound level meter measuring system. (7-1-94)
- **O5. Sound Level.** The sound level recorded shall be that measured during steady state operation at the engine speed specified in Subsections 050.04 and 050.05 of this chapter, two hundred (200) rpm, measured on the loudest side of the OHV. The test speed in rpm shall also be recorded. (7-1-94)
- **06. Calibration**. Calibration of the sound level meter using a sound level calibrator with an accuracy of one-half (1/2) dB shall be made immediately before the first test of each day. Field calibration should by made at intervals of no more than one (1) hour. (7-1-94)

#### 101. -- 149. (RESERVED).

#### 150. EQUIPMENT.

- **01. Sound Level Meter.** A type one (1) sound level meter, which generally can provide the most accurate measurements, shall be used for certification of exhaust systems and for law enforcement purposes. (7-1-94)
- **O2. Tachometer.** A hand-held tachometer of the type described in Subsection 010.11 shall be used if the OHV does not have a permanently affixed tachometer. (7-1-94)
- **03. Calibrator.** A calibrator appropriate for use with the sound level meter shall be used to calibrate the sound level meter. (7-1-94)
- **04. Manual**. Persons measuring sound levels for law enforcement purposes shall use the "Off-Highway Motorcycle And ATV Stationary Sound Test Manual", published by the Motorcycle Industry Council, Inc. for current information concerning manufacturer's specifications for OHV operation. (7-1-94)

#### 151. -- 999. (RESERVED).

Page 4 IAC 2005

# Subject Index

${f A}$
A-Weighting Scale 2
All Terrain Vehicle (ATV) 2
Attachments Prohibited,
Measurement 4
C
V
CC, Cubic Centimeters 2
Calibration, Measurement 4 Calibrator 2
Calibrator, Equipment 4
$\mathbf{D}$
Db or Decibel 2
Definitions, IDAPA 26.01.37, Rules
Governing Test Procedures &
Instruments Of Noise Abatement Of
Off Highway Vehicles 2
E
Engine Temperature, Test
Procedure 4
Equipment 4
Exhaust Outlets, Measurement 4
${f L}$
Location of the Microphone of the
Sound Level Meter, Measurement 4
M
Manual, Equipment 4
Measurement 4
0
Off High way Valida (OHV) 2
Off Highway Vehicle (OHV) 2
Operation of OHV, Test Procedure 3
Operator 2
P
Position of OHV, Test Procedure 3
R
Revolutions Per Minute (RPM) 3
$\mathbf{S}$
Sound Level Meter 3
Sound Level Meter Settings,
Measurement 4
Sound Level Meter, Equipment 4
Sound Level, Measurement 4
Т
Tachometer 3
Tachometer, Equipment 4
Test Procedure 3
Test Site, Test Procedure 3
Test Surface, Test Procedure 3